

## WE CLAIM

1. A method for designing an architecture for an e-business solution, said method comprising:

- 5                developing a business description of the e-business solution, the business description describing each actor and each business function in the e-business solution, the business description further describing each interaction among one or more actors and one or more business functions;
- developing a pictorial representation of the business description;
- 10               establishing one or more business patterns that are identifiable within the pictorial representation, each business pattern being indicative of each grouping of one or more actors and one or more business functions based on a nature of the interaction among the one or more actors and the one or more business functions;
- 15               establishing one or more integration patterns that are identifiable within the pictorial representation, each integration pattern being indicative of an integration of two or more business patterns;
- establishing one or more composite patterns that are identifiable within the pictorial representation, each composite pattern being indicative of a
- 20               grouping of a recurring combination of one or more business patterns and one or more integration patterns; and
- establishing one or more application patterns that are identifiable within the pictorial representation, each application pattern being indicative of a partitioning of an application logic and a data together with the styles of
- 25               interaction among a plurality of logical tiers.

2. The method of claim 1 wherein the developing a pictorial representation of the business description includes:

- 5 identifying all of the actors within the business description;  
depicting each actor in the pictorial representation;  
identifying each business function in the business description;  
depicting each business function in the pictorial representation;  
identifying each interaction among the one or more actors and the one or more business functions; and  
10 depicting each interaction in the pictorial representation.

3. The method of claim 1 wherein establishing one or more business patterns that are identifiable within the pictorial representation includes:

- 15 identifying each business pattern within the pictorial representation;  
and  
depicting each business pattern within the pictorial representation.

4. The method of claim 1 wherein establishing one or more integration patterns that are identifiable within the pictorial representation includes:

- 20 identifying each integration pattern within the pictorial representation; and  
depicting each integration pattern within the pictorial representation.

5. The method of claim 1 wherein establishing one or more composite patterns that are identifiable within the pictorial representation includes:

- identifying each composite pattern within the pictorial
- 5 representation; and
- depicting each composite pattern within the pictorial representation.

6. The method of claim 1 wherein establishing one or more application patterns that are identifiable within the pictorial representation

10 includes:

- gathering one or more business requirements corresponding to each business function and each interaction within a first business pattern of the one or more business patterns;
- identifying each business driver corresponding to the one or more
- 15 business requirements;
- identifying each information technology driver corresponding to the one or more business requirements;
- identifying an application pattern associated with the first business pattern having a best match to each business driver and each information
- 20 technology driver; and
- depicting the application pattern within the pictorial representation.

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7. The method of claim 1 wherein establishing one or more application patterns that are identifiable within the pictorial representation includes:

- 5 gathering one or more business requirements corresponding to each business function and each interaction within a first integration pattern of the one or more integration patterns;
- identifying each business driver corresponding to the one or more business requirements;
- 10 identifying each information technology driver corresponding to the one or more business requirements;
- identifying an application pattern associated with the first integration pattern having a best match to each business driver and each information technology driver; and
- 15 depicting the application pattern within the pictorial representation.

8. The method of claim 1 further comprising:
- refining the pictorial representation

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means for developing a business description of the e-business solution, the business description describing each actor and each business function in the e-business solution, the business description further describing each interaction among one or more actors and one or more business functions;

10 means for establishing one or more business patterns that are identifiable within the pictorial representation, each business pattern being indicative of each grouping of one or more actors and one or more business functions based on a nature of the interaction among the one or more actors and the one or more business functions;

means for establishing one or more composite patterns that are identifiable within the pictorial representation, each composite pattern being indicative of a grouping of a recurring combination of one or more business patterns and one or more integration patterns; and

means for establishing one or more application patterns that are identifiable within the pictorial representation, each application pattern being indicative of a partitioning of an application logic and a data together with the styles of interaction among a plurality of logical tiers.

5 computer readable code for developing a business description of the e-business solution, the business description describing each actor and each business function in the e-business solution, the business description further describing each interaction among one or more actors and one or more business functions;

computer readable code for establishing one or more business patterns that are identifiable within the pictorial representation, each business pattern being indicative of each grouping of one or more actors and one or more business functions based on a nature of the interaction among the one or more actors and the one or more business functions;

20 computer readable code for establishing one or more composite patterns that are identifiable within the pictorial representation, each composite pattern being indicative of a grouping of a recurring combination of one or more business patterns and one or more integration patterns; and

computer readable code for establishing one or more application  
25 patterns that are identifiable within the pictorial representation, each application  
pattern being indicative of a partitioning of an application logic and a data  
together with the styles of interaction among a plurality of logical tiers.

[illegible]

11. The computer program product of claim 10 wherein said computer readable code for developing a pictorial representation of the business description includes:

- 5 computer readable code for depicting each actor in the pictorial representation;
- computer readable code for depicting each business function in the pictorial representation; and
- computer readable code for depicting each interaction among the
- 10 one or more actors and the one or more business functions.

12. The computer program product of claim 10 wherein said computer readable code for establishing one or more business patterns that are identifiable within the pictorial representation includes:

- 15 computer readable code for depicting each business pattern within the pictorial representation.

13. The computer program product of claim 10 wherein said computer readable code for establishing one or more integration patterns that are identifiable within the pictorial representation includes:

- 20 computer readable code for depicting each integration pattern within the pictorial representation.

14. The computer program product of claim 10 wherein said computer readable code for establishing one or more composite patterns that are identifiable within the pictorial representation includes:

- computer readable code for depicting each composite pattern within the pictorial representation.

15. The computer program product of claim 10 wherein said computer readable code for establishing one or more application patterns that are identifiable within the pictorial representation includes:

5 computer readable code for depicting an application pattern within the pictorial representation, the application pattern being associated with one of the business patterns.

16. The computer program product of claim 10 wherein said computer readable code for establishing one or more application patterns that are identifiable within the pictorial representation includes:

10 computer readable code for depicting an application pattern within the pictorial representation, the application pattern being associated with one of the integration patterns.

15 17. The computer program product of claim 10 comprising:  
computer readable code for refining the pictorial representation

18. A method for designing an architecture for an e-business solution, said method comprising:  
20 developing a business description of the e-business solution;  
developing a pictorial representation of the business description;  
and

establishing a plurality of patterns within the pictorial representation, the patterns being indicative of various implementations of the  
25 business description whereby the pictorial representation serves as a documentation for designing the architecture of the e-business solution.

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19. A system for designing an architecture for an e-business solution, said system comprising:

means for developing a business description of the e-business solution;

5 means for developing a pictorial representation of the business description; and

means for establishing a plurality of patterns within the pictorial representation, the patterns being indicative of various implementations of the business description whereby the pictorial representation serves as a

10 documentation for designing the architecture of the e-business solution.

20. A computer program product in a computer readable medium for designing an architecture for an e-business solution, said computer program product comprising:

15 computer readable code for developing a business description of the e-business solution;

computer readable code for developing a pictorial representation of the business description; and

20 computer readable code for establishing a plurality of patterns within the pictorial representation, the patterns being indicative of various implementations of the business description whereby the pictorial representation serves as a documentation for designing the architecture of the e-business solution.

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